

## **Own Energy**

### **Slide 1: Own Energy**

Jacob Susman: Hi, everyone. Pleasure to be with you today. James, thanks so much for the kind introduction, and it's a real pleasure to be here with you all today. Leon, it's always a pleasure to speak at your side as well. I'm actually concerned that I may not have ability to advance the presentation here. So, let me just make sure that everybody is with me now on page two of the presentation. Is that correct?

James Critchfield: Yes, we can see that.

### **Slide 2: Discussion Overview**

Jacob Susman: OK. Great. So, terrific. Well, let me walk through a little bit about in this order, what is Wind Development? What is Community Wind? And who is Own Energy? Because I think it's useful to give an instruction to wind development in general before we burrow down into specifics of Community Wind and then finally how we can use community wind that's the way to get governments institutions and commercial providers more involved in the wind sector in general.

So I'm now on page four actually, called Wind Development - just confirming again that everyone is keeping up as I advance through here. James, are we all right – up to page four?

James Critchfield: Yes. You're good.

### **Slide 3/Slide 4: Wind Development**

Jacob Susman: OK. Great. So, these are kind of the main components of Wind Development. You got to start off picking the right sites, checking its feasibility and then moving through the early and middle stages of development, later into - the later more sort of commercial stages of development, and finally into financing the project, constructing it and operating it. A little bit more detail on that on the following page and you see here from our perspective, there is an early stage of development where the development effort is very localized, the cost is in tens of thousands of dollars.

### **Slide 5: Development Timeline and Cost**

Jacob Susman: And the number of man-hours or the people-hours that is required to do the development work is relatively high, but actually the level of energy and the Community Wind sophistication that's required is a little bit lower which is a good thing because that means that people who are in that community who want to be involved in development can play an active and important role.

Then there's a middle stage of development that involves things like connecting the project to the grid, getting environmental permits in place, finding the person to purchase the power, and managing issues around the regulatory framework and the overall industry at the same time. And here where you start to get into hundreds of thousands of dollars of soft development costs where you're dealing more with regional players as supposed to just local. And the man-hours are actually coming down but you do need more of that sophistication around energy in general and Wind Development in particular because now the issues are getting more complex and difficult to manage. Finally in the later stages of development, this is where you're dealing with national or international players. You're talking about constructing power stations so you're going to be buying turbines, you're going to be leading the construction effort, you're going to need to finance this facility and of course, you're going to have to operate it.

So, in that period of development, other than construction phase where there are many man-hours that go into the actual construction effort, the overall development man-hours here are relatively low but the sophistication and cost are probably at their highest. So I think our overall point here is that as you progress through development, you need that higher level of sophistication because it becomes larger and larger investments that require somebody who knows what they are doing. We'd like to spell out for the local partners we work with, what are the ways that they can get involved in the development of a wind farm and this is for any wind farm.

#### Slide 6: Options and Risks

Jacob Susman: You know you can take the approach of just signing up a lease option if you're a land owner who is in the footprint of a potential wind farm which in terms of its financial upside is relatively low but also the amount of control that local partner is going to have over the – or that local owner is going to have over the development of the project is also relatively low. But the good thing is they will not be asked to put forth a ton of effort and the amount of risk that they will have from the perspective of their own capital is relatively low. But they still have some amount of development risk because that project may never be successful, we put that as moderate.

In more of a joint development framework, you can see all the moderates pop-up in all those categories because that local partner is now playing a role in the project ownership, they have some amount of control over what happens in the development of the project, but they are also required to put in a certain amount of effort in capital. And now they are on the line for the development risk that that project entails.

But you see that from our perspective both are still probably - the right risk reward equation relative to just pure independent development. If this is for somebody who is local in that community who maybe is entrepreneurial but doesn't know the first thing about Wind Development while the financial upside can be very high, the amount capital on risk that they're taking on would also be fairly high to try to go it alone.

#### Slide 7: Land Use and Impact

Jacob Susman: A lot of people ask us sort of, what's the impact of these things in the local community where I'm going to build them? This is an example of the Hull community wind project just outside to Boston right near Logan Airport. But in that – there is a picture is rather but generally across the board you're talking about one to two acres that are impacted per turbine, you want to have set backs of on the order of 1200 feet from homes and roads. But in general, they're a minimal impact on operation at least as pertains to farming and ranching operations. Now, when you get into the corporate and industrial and government type to set ups, the impact on operations could potentially be a bit higher and you have to therefore just be that much more skilled in doing your early stage feasibility and siting work to make sure you're minimizing any potential impact.

#### Slide 8: How Big are These Things?

Jacob Susman: So, a fair question to ask is how big are these things? Well, we set this up for an opportunity in Kansas recently and just kind of looking at the smaller, more - either residential or behind the meter type of turbine, that's something like 225 kilowatts. You know you're talking about 27 meter facility. If it's a more utility scale or megawatt class machine in a 1.5 to 2.3 megawatt range, you see how they get over a hundred meters and can be taller than tallest building in Kansas. So, this is a serious structure that you'll see there on your property.

#### Slide 9: Site Suitability

Jacob Susman: And we gave an example of one of our early stage feasibility analyzes just kind of show some of the things that we look at. Things like where is the substation? What are the buffers who need around an airport? What is the industrial plant that you're in this case trying to serve? What are any protected areas from an environmental perspective in that area to just look in general at topographic features, interconnection issues, setbacks and another environment concerns.

#### Slide 10: Community Wind

Jacob Susman: Let me talk a little bit about Community Wind now. So, Community Wind is part of a broader trend towards mid-size projects and I think commercial and industrial and government development opportunities are great examples of the smaller types of project setups that we're beginning to see as some of the challenges of larger scale development increase. So, I'm actually – I'm going to skip kind of to the right side of this page because I think the drivers of renewable energy are well-established. I think there's no question that is a wind market that grows in a tremendous way by 2020.

#### Slide 11: Drivers of Mid-Sized Market Growth

Jacob Susman: But, specifically, in the mid-size market, we see a big portion of that growth coming north of \$100 billion worth of opportunity, and that's because of three main issues. The first is that there are underserved cooperative municipality and smaller investor-owned utility and CNI off-take opportunities in the mid-sized project markets that are often overlooked by the – by some of the larger scale projects.

The second reason is that in mid-sized projects, you often end up with community support as opposed to the criticism that you increasingly see in some of the larger scale projects. And finally, the capacity and speed and limited expense of interconnecting mid-sized projects is what's also driving the growth in this market.

So, we are active participants in the American Wind Energy Association, which has an orientation to the larger projects historically, and we have a lot of friends in those companies and we're by no way saying that larger scale projects shouldn't continue to be built in a major way. And that's how we're going to get to our overall wind goals. But we do think that the mid-sized market is really poised for growth over the next several years.

#### Slide 12: Community Wind Taking Off in the U.S.A.

Jacob Susman: The other thing we think is poised for growth is community wind, specially. And it's really taking off in United States now. You know, it represents something like two to four percent of the overall wind market. Let's put that in perspective. There are countries in Europe like Denmark and Germany that have seen over 50 percent penetration of community wind. And we think a lot of the reason for that is there's greater acceptance of wind by a broader base of constituents when you start offering ownership to folks who are local of that community. There are also more local jobs and profits that get recycled locally. And some of the things we're seeing here in the U.S. are you know now having a formal policy position that's come out of the American Wind Energy Association office seeing more ways to better use the existing transmission grid and more – pretty major investors pouring into the community wind space. So, lots of recent movement in the community wind market, and reasonably, that is poised for tremendous growth.

#### Slide 13: Community Wind Characteristics

Jacob Susman: Here are some of the benefits of community wind. Its greater economic benefits for the community. It's community members who have a direct financial stake in the project where members of that community also have decision-making rights and project sizes that, in our experience, have typically been below 100 megawatts, and not to mention just a genuine sense of community involvement.

We increasingly find that members of the communities where wind is going to be developed are really crying out for an opportunity to be directly engaged in development and directly engaged in ownership.

Before I close the section here on community wind, I probably should have started upfront with a definition. And so, the way the American Wind Energy Association defines it and the way that Own Energy thinks about community wind is really any project under 20 megawatts that meets certain conditions of community acceptance, really, is a community wind project just by nature of its smaller size. And further on that definition, anything that's 20 to 100 megawatts can be considered community wind based on an ownership test.

So, the owners of the project would eventually have to prove that more than about a third of the project has been kept there in state or in the local community for it to be considered community wind.

#### Slide 14: CW for Corporates, Institutions and Governments

Jacob Susman: So, I want to move on now to how corporations, institutions and governments can play an important role in the growth of community wind over the next several years. You know, one of the things that we've seen or, in general, the things we've seen when CNIs look to get involved in community wind are just the obvious benefits that it brings to those types of investors and local partners in these projects.

#### Slide 15: C&I's and Community Wind

Jacob Susman: You know, first and foremost, wind, in general, can displace a higher avoided and floating cost of conventional power versus wind, which is a fixed rate resource over a 25 or so year project life. You know, there's also the ownership of the green credits and other renewable attributes like the RECs that come off of these projects. And we're pleased that many of the folks on the phone today and encouraged by the EPAs efforts are ramping up their desire to own more of these green credits which is terrific.

A lot of the incentives for wind, in general, come through tax credits, either in the form of an accelerated depreciation credit or a production tax credit or investment tax credit. And those offer an attractive tax shield to certain commercial and industrial partners in these projects. I should have mentioned this right up front, but these are attractive ROI opportunities for the CFOs on the phone. These are profitable projects, either from a cost avoidance perspective or from a straight commercial investment opportunity.

And, finally, increasingly, we're seeing companies with compliance goals around renewable energy, and these can help meet those goals and possibly more importantly, just the overall good feeling about companies that are investing, not only in renewable energy, but in community-based projects that are going to generate power right there close to home. That's really got a wonderful public relations message that it brings.

#### Slide 16: C&I Partners –Instrumental in Early Stage

Jacob Susman: So, I just want to walk through briefly, this is that same graphic we saw earlier in the presentation but switched around a little bit to show you that the role that a CNI partner can play in the development of a community wind project. And from our perspective, that CNI partner is going to be instrumental in the early stages of development.

So that's around things like picking the specific site for the project to be constructed and making sure there is appropriate control of the land that's required. There are aspects of the feasibility process, particularly as it pertains to the energy usage of the facility, or maybe some of the utility conditions in the area where the industrial producer may have some experience that it can provide.

And finally, we always encourage, in our business, our local partners to install a tower and study the wind for no less than six months before really proceeding with full-scale development of the project.

#### Slide 17: Developer Bridges Capital & Skill

Jacob Susman: Under our structuring, you would have the developer really bridge the middle stages of development. So that's things like making sure the project is getting interconnected and making – completing the wind resource analysis, completing some of the siting issues and then, of course, making sure that the permits are in place, that the regulatory conditions are met. But the one area where a local partner can play a very interesting role you know, especially in CNI projects, is an off-take.

You know, this is a real pinch point in our industry right now where there are fewer off-takers stepping up to buy their share of renewable power. And having an off-taker built into your project early on, i.e. a commercial installation where there's an anchor tenant for the power that can really make or break a project. So, although not as much effort is required from the local partner in these stages, what is really influential is knowing that you have that off-take agreement sort of already lined up.

#### Slide 18: Developer – Drives to Completion

Jacob Susman: And in the later stages of development, it's still the developer that's driving to completion. And while you're in the middle stages of development, you're already preparing for things like turbine procurement, construction, financing and operations. But when you get to these later stages of development, you've got a lot of those middle stages things worked out and you've got your site, you're permitted, you're interconnected and you're ready to go. But now you need to go to the global turbine manufacturers and make sure you're getting the best deal. You need to make sure that your BOP contractor is going to be able to construct the project in a way that's financeable and that's going to be consistent with the way the host likes to run its facility.

But what is interesting is that in some instances a CNI investor can play an important role in the financing, certainly, by being part of that capital structure that if it chooses to invest in the equity, but also maybe finding other ways to help through the structuring process, and so many industrials already have their own financial relationships that they can bring to bear. And then finally, it's the developer who ought to be controlling the operations of the project. I know that's probably difficult for some who are used to operating industrial facilities, but there are things that are unique to wind farm just like any industrial process that really deserved a wind experienced operator to be closely engaged in managing the process.

#### Slide 19: Own Energy Highlights

Jacob Susman: I'll just talk a little bit about Own Energy and then I'll run it over to the next presenter.

#### Slide 20: Leader in "Community Wind" and Mid-Sized Project Development

Jacob Susman: You know we are a leader in the community wind business and in mid-sized project development overall. We have 25 active projects around the country primarily in the Midwest, but as far east as Pennsylvania and as far west as Montana. Four hundred and seventy-five megawatts of our 1,600 megawatt pipeline are at what we call an actionable stage where they're actively negotiating off-take agreements or financing arrangements for the project.

We did successfully complete the development of a project in 2009 and ended up partnering with a large scale renewable energy IPP in that – in that project to carry it to completion. One of the things we're most excited about recently is our strategic alliance with the National Farmers Union, which many of you know is a powerful farmer group that really speaks to the community orientation that we bring to the table. And we work together on developing projects on community wind policy and certainly, on making sure that the NFU members are educated on wind energy issues.

I think the other thing that you need to know about our company is we're – as far as we know, we're the only venture-capital backed wind developer so that gives us a strong balance sheet at the corporate level. But we also have a framework agreement in place with a large European bank that enables us to carry projects through to commercial operations. So that effectively enables us to leverage that bank as our balance sheet in the process.

#### Slide 21: How OE Works With Local Partners

Jacob Susman: I think I mentioned a lot of this earlier but the way we work with local partners is we often sign that they turn up saying, "You know I've done some of the early stage work on a project, I've taught a little bit about feasibility or maybe I've gotten control of the land" or they might have even invested in that tower already.

But they're running into the part of the development process where they may be getting a little ahead of themselves either because they don't have the capital to complete the project or because they're – they don't have the expertise in areas like development, construction, turbine procurement and operations. So there's a real nice yin and yang, if you will, in the way that we work with local partners.

#### Slide 22: Management Team

Jacob Susman: James was kind enough to give my background; the other members of our senior management team Cindy Crooks spent 20 plus years at (FPL) Energy, which is next era today and the leading wind energy company in the United States in terms of installed capacity where Cindy led their turbine procurement efforts and warranty claims efforts not to mention the seven years she spent in development there of wind farms.

And Ray Henger our CFO spent 14 years at a combination of Credit Suisse and its predecessor DLJ exclusively in the energy industry, exclusively in project finance settings. And then we're joined by another 10 development professionals from companies like Horizon, GE, Goldman Sachs who are all leaders in the renewable energy business. Many or most of our team have advanced degrees, but they're a real down-to-earth crew who are passionate about renewable energy and about working with our local partners.

#### Slide 23: Contact Information

Jacob Susman: I thank you for your time. It's been a pleasure and I look forward to hearing comments from Leon and the other speakers. Thanks.

James Critchfield: Thank you, Jacob. I think now what we'll do is let me introduce our next speaker who is Leon Steinberg. He is the chief executive officer of National Wind. National Wind is the largest developer of utility scale community wind projects in the U.S., and is a company that has over 40 employees with offices in Minneapolis, Minnesota and Grand Forks, North Dakota.

National Wind is involved in developing both early and advanced stage projects in the states of North Dakota, South Dakota, Minnesota, Iowa, Colorado, Texas, Montana, Wyoming, Nebraska and Ohio. Leon is a member of the American Wind Energy Association, Windustry, and Wind on the Wires and also participates in a number of environmental groups.

Prior to his position in National Wind, Leon was founder and chief executive officer of Meritas and chief executive officer of Intellevate and FoundationIP. He currently serves on the board of National Wind, (Delphi) Financial Holdings, Key Capital and Washington Law and Politics Magazine. Leon is married with five children and has an undergraduate degree from the University of Minnesota and a Juris Doctorate. So with that, I'd like to turn the controls over to Leon so we can hear a little about your innovative windfrastructure product offering that might provide some interesting benefits to some of the callers on our webinar today.